AMENDMENT AND RESPONSE UNDER 37 C.F.R. § 1.116 - EXPEDITED PROCEDURE

Serial Number: 10/578,822

Filing Date: May 9, 2006 Title: MULTI-LINE ADDRESSING METHODS AND APPARATUS Page 4 Dkt: 1365.106US1

IN THE CLAIMS

Please amend the claims as follows:

- 1. (Previously Presented) A controlled current display driver for a passive matrix organic light emitting diode (OLED) display, said display having a matrix of OLED pixels addressed by row and column electrodes, said display driver being configured to simultaneously drive a plurality of said column electrodes with a plurality of column currents and a plurality of said row electrodes with a plurality of row currents such that a sum of said column currents is divided between said row electrodes in a variable ratio, the display driver comprising:
- a plurality of column current sources for driving said column electrodes simultaneously with a plurality of controlled column currents; and
- a current generator, the current generator comprising:
- a first, reference current input to receive a reference current for driving a first of said plurality of row electrodes;
- a second, ratioed current input to receive a ratioed current for driving a second of said plurality of row electrodes;
- a first ratio control input to receive a first row current ratio control;
- a controllable current mirror having a first current generator control input coupled to said first ratio control input, a current input coupled to said reference current input, and an output coupled to said ratioed current input;
- said current generator being configured such that a signal on said first current generator control input controls a ratio of said ratioed current to said reference current;
- such that said sum of said column currents is divided in proportion to said ratio of said ratioed current to said reference current.

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2. (Previously Presented) A controlled current display driver as claimed in claim 1 wherein said controllable current mirror includes a second current generator control input coupled to a second ratio control input to receive a second row current ratio control signal, and wherein said ratio of said ratioed current to said reference current is dependent upon a ratio of said first row current ratio control signal to said second row current ratio control signal.

- 3. (Previously Presented) A controlled current display driver as claimed in claim 2, wherein said first and second row current ratio control signals comprise current signals.
- 4. (Previously Presented) A controlled current display driver as claimed in claim 1, further comprising one or more digital to analogue convertors to provide said control signal(s).
- 5. (Previously Presented) A controlled current display driver as claimed in claim 2, comprising a plurality of said ratioed current inputs and a corresponding plurality of said second ratio control inputs for setting a plurality of said current ratios, one for each of said second ration control inputs.
- 6. (Previously Presented) A controlled current display driver as claimed in claim 1, further comprising at least one selector to select two of said plurality of row electrodes such that one of said selected row electrodes is driven by said ratioed current and another of said selected row electrodes is driven by said reference current.
- 7. (Previously Presented) A controlled current display driver as claimed in claim 6 wherein said selector is coupled to said row electrodes to selectively couple a selected one of said row electrodes to said reference current input and another of said row electrodes to said ratioed current input.
- 8. (Previously Presented) A controlled current display driver as claimed in claim 6 wherein said current mirror comprises a plurality of mirror units, one for each of said plurality of row

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electrodes, and wherein said selector is configured to selectively couple at least said first ratio control input to a said mirror unit.

9. (Currently Amended) A method of controlled current driving of a passive matrix organic light emitting diode (OLED) display, said display having a matrix of OLED pixels addressed by row and column electrodes, the method comprising simultaneously driving a plurality of said column electrodes with a plurality of controlled column currents and a plurality of said row electrodes with a plurality of controlled row currents, said driving of said plurality of row electrodes being at the same time as said driving of said plurality of column electrodes, using a controllable current mirror such that a sum of said column currents is divided between said row electrodes in a controllable variable ratio.

10. (Canceled)